



Patent [19]

[11] Patent Number: 2001096114
[45] Date of Patent: Apr. 10, 2001

[54] AIR CLEANER

[21] Appl. No.: 11276475 JP11276475 JP

[22] Filed: Sep. 29, 1999
[51] Int. Cl.⁷ B01D04600

[57] ABSTRACT

PROBLEM TO BE SOLVED: To provide an air cleaner having a compact shape and performing both of dust collection and deodorization.

SOLUTION: A dust collection filter 3 holding a photocatalyst and an LED unit 4 are arranged in a substrate 1 and the dust collection filter is irradiated with light having a short wavelength exciting the photocatalyst from the LED unit 4. Dust collection is performed by the dust collection filter 3 and deodorization is performed by irradiating the photocatalyst with light from LEDs. Since the dust collection filter 3 holding the photocatalyst can be made thin and the LEDs are small- sized and a high voltage inverter circuit is dispensed with, an air cleaner can be formed into an extremely compact shape.
